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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,863	02/03/2004	Charles L. Bruzzone	59472US002	3508
32692	7590	03/22/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			SEVER, ANDREW T	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	
			2851	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/771,863

Applicant(s)

BRUZZONE ET AL.

Examiner

Andrew T. Sever

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/2004 and 6/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 2/3/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

There is no copy of the "Handbook of Pressure Sensitive Adhesive Technology".

Specification

2. The attempt to incorporate subject matter into this application by reference to the Handbook of Pressure sensitive Adhesive Technology is improper because applicant did not provide a copy.

Applicant incorporated by reference all cited publications in the specification and applicant cited the above Handbook extensively, but did not provide a copy.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7 and 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by

Katsumata et al. (US 6,829,090.)

Katsumata teaches in figure 4 a polarizing beam splitter, comprising:

A multilayer reflective polarizing film (it is made of at least three layers 22, 25, 21 and 22);

A pressure sensitive adhesive (23 which is described as being a soft adhesive which in column 6 lines 21-27 is described as a pressure sensitive adhesive (in the non-UV form) disposed on the multilayer reflective polarizing film; and

A first rigid cover (the prism glass 54) disposed on the pressure sensitive adhesive.

With regards to applicant's claim 2:

The prism includes two covers.

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With regards to applicant's claim 3:

Katsumata in column 6 lines 21-27 also describes a UV adhesive, which would be a structural adhesive.

With regards to applicant's claim 4:

The covers are prisms.

With regards to applicant's claim 5:

Katsumata teaches in column 6 lines 27-39 that the prism is made of SF57 a type of glass.

With regards to applicant's claims 6 and 7:

As acknowledged by applicant on page 12 optical quality Pressure-Sensitive adhesive such as rubber like materials are generally free of photo initiators and un-reacted monomers or un-reacted oligomers.

With regards to applicant's claim 16:

See figure 9 for example where the projection lens system is part 79.

With regards to applicant's claim 17:

See above with regards to applicant's claims 16 and 2.

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With regards to applicant's claims 18-23:

The method of making the polarizing beam splitter of Katsumata is inherent since the polarizing beam splitter exists it must have been made.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-15 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano et al. (US 6,386,710) in view of Katsumata et al. (US 6,829,090.)

Kusano teaches in figure 2 a polarizing beam splitter, comprising:

A first multilayer reflective polarizing film (1d);

A second multilayer reflective polarizing film (1e) proximate the first multilayer reflective polarizing film, wherein a major surface of the second multilayer reflective polarizing film faces a major surface of the first multilayer reflective polarizing film;

An adhesive (1c) disposed between the first multilayer reflective polarizing film and the second multilayer reflective polarizing film;

A first rigid cover (1a) disposed adjacent to the first polarizing film; and

A second rigid cover (1b) disposed adjacent to the second multilayer reflective polarizing film

Kusano however does not teach that at least one of the covers is attached by a pressure sensitive adhesive. Katsumata teaches in column 4 lines 1-14 that by using pressure sensitive adhesive (soft type adhesive) it is possible to suppress internal stress and optical distortion. Accordingly it would have been obvious to one of ordinary skill in the art to use pressure sensitive adhesive as taught by Katsumata to attach at least one of the covers of Kusano since it is desirable to reduce optical distortion in a polarization beam splitter.

With regards to applicant's claim 9:

Katsumata in column 6 lines 21-27 also describes a UV adhesive which would be a structural adhesive and since prior art prisms used structural adhesive exclusively it would be obvious to have a mix of the UV adhesive (Structural) and the pressure sensitive adhesive.

With regards to applicant's claim 10:

One embodiment of Katsumata teaches only Structural adhesive.

With regards to applicant's claim 11:

As discussed above, absent evidence to the contrary the adhesive between the two films is a structural adhesive.

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With regards to applicant's claim 12:

Both covers are prisms.

With regards to applicant's claim 13:

Kusano teaches in column 5 lines 1-13 that the prisms are glass.

With regards to applicant's claims 14 and 15:

See the above discussion with regards to claims 6 and 7 in the 35 USC 102e rejection based on Katsumata.

With regards to applicant's claims 24-28:

The method of making the polarizing beam splitter of Kusano in view of Katsumata just described is obvious, since the beam splitter must be made.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,557,999 to Shimizu teaches in column 8 lines 41-54 laminating components in a PBS with pressure sensitive adhesive.

US 6,840,624 to Yoneyama et al. teaches a PBS in figure 2.

US 6,160,665 to Yuan teaches various PBS.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS


JUDY NGUYEN
SUPERVISORY PATENT EXAMINER